## REMARKS

Applicants have carefully studied the Office Action mailed on October 7, 2004, which issued in connection with this application. The present response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the claims in condition for allowance. Favorable reconsideration and allowance of the present claims are respectfully requested.

### Amendments to the Specification

All amendments to the specification are of formal nature and are identical to the amendments introduced in the parent application Ser. No. 09/080,285 (U.S. Patent No. 6,040,181). No new subject matter has been added as a result of these amendments, no new search is required, and no new issues are raised.

### Pending Claims

Claims 53 and 70-88 were pending and at issue in the application. Claims 53 and 76-81 have been allowed. Claims 70, 71 and 74 have been rejected under 35 U.S.C. §102(b) and/or 35 U.S.C. §102(e) as being anticipated by prior art. Claims 72, 73, 75, and 82-88 have been objected to as being dependent upon a rejected base claim.

Claim 71 has been canceled without prejudice or disclaimer. Applicants note for the record that the present amendment is made solely to expedite the prosecution and not as an admission of anticipation. Applicants reserve the right to pursue canceled subject matter in a continuing application.

Claim 70 has been amended by replacing the recitation "complementary to a portion of SEQ ID NO: 19" with the recitation "complementary to a portion of a human bcl-2 mRNA or a portion of

a human bcl-2 primary transcript". Similarly, claim 72 has been amended by replacing the recitation "complementary to a splice acceptor site of SEQ ID NO:19" with the recitation "complementary to a splice acceptor site of a human bcl-2 primary transcript"; claim 73 has been amended by replacing the recitation "complementary to a splice donor site of SEQ ID NO:22" with the recitation "complementary to a splice donor site of a human bcl-2 primary transcript"; and claim 74 has been amended by replacing the recitation "complementary to a 5'-untranslated region of SEQ ID NO:19" with the recitation "complementary to a 5'-untranslated region of a human bcl-2 mRNA or a human bcl-2 primary transcript". Support for the phrases "complementary to a portion of a human bcl-2 mRNA" and "complementary to a 5'-untranslated region of a human bcl-2 mRNA" can be found, for example, at page 3, lines 6-10 and lines 17-20; page 4, lines 1-5; page 5, lines 1-7; page 12, lines 1-12; Table 1 at page 13 and corresponding disclosure at page 20, lines 10-30. Support for the phrases "complementary to a portion of a human bcl-2 primary transcript", "complementary to a splice acceptor site of a human bcl-2 primary transcript", "complementary to a splice donor site of a human bcl-2 primary transcript", and "complementary to a 5'-untranslated region of a human bcl-2 primary transcript" can be found, for example, at page 21, lines 1-15; page 3, lines 17-20; page 4, lines 16-19 and 27-30; page 5, lines 1-7; page 12, lines 1-12; Table 1 at page 13 and corresponding disclosure at page 20, lines 10-30.

Claims 73, 75, 82, and 88 have been amended to correct dependency.

No new subject matter has been added as a result of these amendments, no new search is required, and no new issues are raised.

**35 U.S.C. §102(b) and §102(e) Rejections**

In the Office Action, the Examiner has rejected claim 70 under 35 U.S.C. §102(b) as being anticipated by Georges *et al.* (WO 9213102, published August 6, 1992) and under 35 U.S.C. §102(e) as being anticipated by Gold *et al.* (U.S. Patent No. 5,475,096, filed June 10, 1991). Claims 70 and 74 have been also rejected under 35 U.S.C. §102(e) as being anticipated by Caceci *et al.*

(U.S. Patent No. 5,932,697, filed December 23, 1991). Claim 71 has been rejected under 35 U.S.C. §102(b) as being anticipated by Wilcox *et al.* (EP 0340948, published November 8, 1989) and under 35 U.S.C. §102(e) as being anticipated by Thompson *et al.* (U.S. Patent No. 5,750,390, filed August 26, 1992).

The Examiner contends that each of the cited references discloses an oligonucleotide that is complementary or substantially complementary to SEQ ID NO: 19 or SEQ ID NO: 22 as recited in the rejected claims. Although none of the cited references antedate the priority application Ser. No. 07/288,692 filed on December 22, 1988 (the '692 application), the Examiner asserts that these references are prior art with respect to the claims reciting SEQ ID NOS: 19 and 22, because, with respect to the disclosure of SEQ ID NOS: 19 and 22, the present application can claim priority only to the application Ser. No. 08/124,256 (the '256 application) filed on September 20, 1993 (see page 3 of the Office Action).

As claim 71 has been canceled, the rejection of this claim is rendered moot. With respect to claims 70 and 74, the rejection is respectfully traversed for the reasons provided below.

Although, as explained below and in contrast to the Examiner's assertion, the written description provided in the '692 priority application is completely adequate to support the recitation of SEQ ID NOS: 19 and 22, to further expedite prosecution, claim 70 and its dependent claims 72, 73, and 74 have been amended to replace the SEQ ID NO recitations with the terms "human bcl-2 mRNA" and "human bcl-2 primary transcript" which are literally used in the '692 application. See, for example, page 4, lines 4-9 and lines 19-23; page 5, line 7 - page 6, line 4; page 7, line 15 - page 8, line 1; page 16, line 9 - page 17, line 17, and Table 1 at page 9 of the '692 application (these sections include the specific disclosure of anticode oligomers complementary to splice donor and acceptor sites in a human bcl-2 primary transcript as recited in claims 72 and 73 as amended as well

as the specific disclosure of anticode oligomers complementary to a 5'-untranslated region of a human bcl-2 primary transcript as recited in claim 74 as amended)[1].

Claims 70 and 74 as amended call for anticode oligomers which are from 10 to 40 bases in length and are complementary to a portion[2] of a human bcl-2 mRNA or a portion of a human bcl-2 primary transcript. As such anticode oligomers are supported by the disclosure of the '692 priority application, this claim feature is entitled to the priority of the December 22, 1988 filing date of the '692 application. None of the cited references have an effective prior art date before December 22, 1988 and therefore cannot serve as the basis for prior art rejection.

For the record, applicants further note that, in contrast to the Examiner's assertion, the written description provided in the '692 application is completely adequate to support the recitation of SEQ ID NOS: 19, 20 and 22 in the rejected claims. The test of whether an earlier written description is adequate to support a later-claimed invention is not whether it is disclosed *ipsis verbis* in the earlier application but whether it reasonably conveys to one of ordinary skill in the art that the applicant had possession of the later claimed invention. See *Wertheim*, 541 F.2d, 257, 263-264 (CCPA 1976); *Union Oil Co. of Calif. v. Atlantic Richfield Co.*, 208 F.3d 989, 1000-1001 (Fed. Cir. 2000); *University of Rochester v. G. D. Searle & Co., Inc.*, 358 F.3d 916, 923 (Fed. Cir. 2004) ("claimed subject matter 'need not be described in haec verba' in the specification to satisfy the written description requirement"). The person of ordinary skill need only be able to recognize from the disclosure that the applicant's invention included the later claimed subject matter.

Applicant can demonstrate that these requirements are met for a limitation not literally described by evidence that the limitation is understood by the person of ordinary skill in the art, a showing that the limitation is disclosed fully in prior art publications and is therefore known in the field, or evidence that the limitation is logically inferred by the person of ordinary skill in the art from the disclosure presented. See MPEP §2163; *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1560

[1] For support in the present application, see the Pending Claims section.
[2] 5'-untranslated region in claim 74

and 1563 (Fed. Cir. 1991); *University of Rochester v. G. D. Searle & Co., Inc.*, 358 F.3d 916, 921 (Fed. Cir. 2004); *Enzo Biochem, Inc. v. Gen-Probe Inc.*, 323 F.3d 956, 969 (Fed. Cir. 2002).

SEQ ID NO:19 as disclosed and claimed in the present application is the nucleic acid sequence of the human bcl-2 mRNA, while SEQ ID NO:20 and SEQ ID NO:22 are the two different coding (open reading frame) sequences resulting from alternative splicing of the primary human bcl-2 transcript. Applicants respectfully submit that these sequences were known at the time of filing of the '692 application and available to any person skilled in the art, *e.g.*, from the publication by Tsujimoto *et al.* (Proc. Natl. Acad. Sci. USA 1986, 83:5214-5218; attached as Exhibit A). Specifically, Figure 3A of the Tsujimoto reference discloses a nucleotide sequence of the 5.5-kb bcl-2 transcript, which is identical to SEQ ID NO: 19[3] (see Clustal W (1.82) sequence alignment attached as Exhibit B). Figure 3B of the Tsujimoto reference discloses a nucleotide sequence of the 3.5-kb bcl-2 transcript. The sequence corresponding to the open reading frame in this transcript is identical to SEQ ID NO: 22 (see Clustal W (1.82) sequence alignment attached as Exhibit C).

The Tsujimoto publication is referred to in various parts of the '692 application. For example, at page 17, lines 10-12, the '692 application discloses that "the human bcl-2 gene gives rise to several transcripts through alternative splice site selections, see Tsujimoto, et al., Proc. Natl. Acad. Sci. USA, 83:5214-5218, 1986". Furthermore, the '692 application discloses in the Examples at page 15, line 21 - page 16, line 2 that the human bcl-2 cDNA described in the Tsujimoto publication was used as a $^{32}$P-labeled probe to identify bcl-2 transcripts by hybridization to cellular mRNA. In light of these references to the Tsujimoto publication, a person skilled in the art would have understood that SEQ ID NOS: 19, 20 and 22 were intended to be part of the '692 application as a source of sequence information for designing anticode oligomers complementary to strategic sites along a human bcl-2 mRNA or a human bcl-2 primary transcript.

[3] SEQ ID NO: 19 is missing a poly A stretch at the very 3' end which is shown in Figure 3A of the Tsujimoto reference. This stretch is present in every mRNA and does not represent a unique portion of the sequence.

It follows that the applicant was in possession of SEQ ID NOS: 19, 20 and 22 as of the filing date of the '692 application, and the allegedly "new" disclosure of these sequences provided in the '256 application is not new at all. In the '256 application, SEQ ID NOS: 19, 20 and 22 were simply added for convenience.

In light of the arguments presented above, applicants respectfully note that the terms "human bcl-2 mRNA" and "human bcl-2 primary transcript" recited in claims 70, 72, 73, and 74 as amended as well as the specific SEQ ID NOS recited in these claims prior to the amendment are entitled to the priority of the filing date of the '692 application, *i.e.*, December 22, 1988. As this date is before the effective prior art date of any of the cited references, these references cannot serve as the basis for prior art rejection.

In summary, none of the references cited by the Examiner represent prior art and anticipate the present invention. Reconsideration and withdrawal of the anticipation rejection is believed to be in order.

## CONCLUSION

Applicants request entry of the foregoing amendments and remarks in the file history of this application. In view of the above amendments and remarks, it is respectfully submitted that claims 53, 70 and 72-88 are now in condition for allowance and such action is earnestly solicited. If the Examiner believes that a telephone conversation would help advance the prosecution in this case, the Examiner is respectfully requested to call the undersigned attorney at (212) 527-7770. The Examiner is hereby authorized to charge any additional fees associated with this response to our Deposit Account No. 04-0100.

Dated: February 7, 2005

Respectfully submitted,

By _____

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